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SEQUENCE LISTING

<110> THE JOHN HOPKINS UNIVERSITY

<120> ENGINEERED RNAi ADENOVIRUS SILENCING EXPRESSION (ERASE)  
OF DNA REPAIR PROTEINS

<130> 59564-PCT (71699)

<140> PCT/US03/36367

<141> 2003-11-12

<150> 60/425,897

<151> 2002-11-12

<160> 41

<170> PatentIn Ver. 3.2

<210> 1

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 1

tagctctatc atgttctagt tgacggcaga agcttgtgcc gtcgactagg acatggtaga 60  
gttacagttt ttt 73

<210> 2

<211> 79

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 2

gatcaaaaaa ctgtaactct accatgtcct agtcgacggc acaagcttct gccgtcaact 60  
agaacatgat agagctacg 79

<210> 3

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 3

tgccgtcaac tagaacatga tagagctaca g

31

<210> 4  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 4  
 cctggaggct tgtgttgagg ctgatacaga agcttgtgta tcagcctcag cataagcctc 60  
 cgggtagttt ttt 73

<210> 5  
 <211> 79  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 5  
 gatcaaaaaa ctaccggag gcttatgctg aggctgatac acaagcttct gtatcagcct 60  
 caacacaagc ctccaggcg 79

<210> 6  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 target sequence

<400> 6  
 tgtatcagcc tcaacacaag cctccaggca g 31

<210> 7  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 7  
 tagtatgttg ctacaatcag ctccgtaaga agcttgttac ggagctgatt gtggcgacgt 60  
 attactcttt ttt 73

<210> 8  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 8  
gatcaaaaa gagtaatacg tcgccacaat cagctccgta acaagcttct tacggagctg 60  
attgtagcaa catactacg 79

<210> 9  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 9  
ttacggagct gattgtagca acatactact c 31

<210> 10  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 10  
tattatattc ctctggtgtg gcactgccga agcttgggca gtgtcacact agagggatat 60  
agtacagttt ttt 73

<210> 11  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 11  
gatcaaaaa ctgtactata tccctctagt gtgacactgc ccaagcttcg gcagtgccac 60  
accagaggaa tataatacg 79

<210> 12  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 target sequence

<400> 12  
 ggccagtgcc caccagagga atataatata g 31

<210> 13  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 13  
 ttgctgcaat ccgcagaagt ctcgttatga agcttgataa tgagacttct gcggattgta 60  
 gtaattcttt ttt 73

<210> 14  
 <211> 79  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 14  
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 tctgcggatt gcagcaacg 79

<210> 15  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 target sequence

<400> 15  
 ataacgagac ttctgcggat tgcagcaacc 30

<210> 16  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 16

ctcatgacca ctggccattc cacagcatga agcttgatgc tgtggagtgg ccggtgggta 60  
tgagtcgttt ttt 73

&lt;210&gt; 17

&lt;211&gt; 79

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 17

gatcaaaaaa cgactcataa ccaccggcca ctccacagca tcaagcttca tgctgtggaa 60  
tggccagtgg tcatgagcg 79

&lt;210&gt; 18

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
target sequence

&lt;400&gt; 18

atgctgtgga atggccagtg gtcattgagcc g 31

&lt;210&gt; 19

&lt;211&gt; 73

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 19

atgtctgtaa tgccagcacc gcgggggctga agcttgagcc tcgtgggtgct ggtattacag 60  
atatcttttt ttt 73

&lt;210&gt; 20

&lt;211&gt; 79

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 20

gatcaaaaaa aagatatctg taataccagc accacgaggc tcaagcttca gccccgcggt 60  
gctggcatta cagacatcg 79

&lt;210&gt; 21

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
target sequence

&lt;400&gt; 21

agccccgcgg tgctggcatt acagacatct t 31

&lt;210&gt; 22

&lt;211&gt; 73

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 22

gatgaacttc acccaataat cctaggagga agcttgcttc taggattatt gggtaggagtt 60  
cgtcttattt ttt 73

&lt;210&gt; 23

&lt;211&gt; 79

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

&lt;400&gt; 23

gatcaaaaaa taagacgaac tccaccaat aatcctagaa gcaagcttcc tcctaggatt 60  
attgggtgaa gttcatcg 79

&lt;210&gt; 24

&lt;211&gt; 31

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 24  
ctcctaggat tattgggtga agttcatcct a 31

<210> 25  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 25  
tgaagttgca cagaagtgag gacaaccgga agcttgggggt tggttcttact tctgtgcagc 60  
ttcattattt ttt 73

<210> 26  
<211> 79  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 26  
gatcaaaaaa taatgaagct gcacagaagt aagaacaacc ccaagcttcg ggttgtcctc 60  
acttctgtgc aacttcacg 79

<210> 27  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
target sequence

<400> 27  
gggttgcct cacttctgtg caacttcact a 31

<210> 28  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 28  
 tagctctatc atgttctagt tgacggcann nnnnnntgcc gtcgactagg acatggtaga 60  
 gttacagttt ttt 73

<210> 29  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 29  
 cctggaggct tgtgttgagg ctgatacann nnnnnntgta tcagcctcag cataagcctc 60  
 cgggtagttt ttt 73

<210> 30  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<220>  
 <221> modified\_base  
 <222> (29)..(36)  
 <223> "n" may be a, t, c or g; see specification for various  
 other descriptions.

<400> 30  
 tagtatgttg ctacaatcag ctccgtaann nnnnnnttac ggagctgatt gtggcgacgt 60  
 attactcttt ttt 73

<210> 31  
 <211> 73  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 31

tattatattc ctctggtgtg gcactgccnn nnnnnnggca gtgtcacact agagggatat 60  
agtacagttt ttt 73

<210> 32

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 32

ttgctgcaat ccgcagaagt ctcgttatnn nnnnnnataa tgagacttct gcggattgta 60  
gtaattcttt ttt 73

<210> 33

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>

<221> modified\_base

<222> (29)..(36)

<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 33

ctcatgacca ctggccattc cacagcatnn nnnnnnatgc tgtggagtgg ccggtgggta 60  
tgagtcgttt ttt 73

<210> 34  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 34  
atgtctgtaa tgccagcacc gcggggctnn nnnnnnagcc tcgtgggtgct ggtattacag 60  
atatcttttt ttt 73

<210> 35  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 35  
gatgaacttc acccaataat cctaggagnn nnnnnncttc taggattatt gggtaggagtt 60  
cgtcttattt ttt 73

<210> 36  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<220>  
<221> modified\_base  
<222> (29)..(36)  
<223> "n" may be a, t, c or g; see specification for various  
other descriptions.

<400> 36  
tgaagttgca cagaagtgag gacaaccn nnnnnngggt tggtcttact tctgtgcagc 60  
ttcattattt ttt 73

<210> 37  
 <211> 179  
 <212> DNA  
 <213> Human adenovirus type 5

<400> 37  
 ctctggccgg tcaggcgcg gcaatcggtg acgctctaga ccgtgcaaaa ggagagcctg 60  
 taagcgggca ctcttcctg gtctgggtga taaattcgca agggatcat ggcggacgac 120  
 cggggttcga gccccgtatc cggccgtccg ccgtgatcca tgcggttacc gcccgcgtg 179

<210> 38  
 <211> 127  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 promoter sequence

<400> 38  
 ggccgcgggg aggagtccgt ggtctggatt ccaattcagc gggagccacc tgatgaagct 60  
 tgatcgggtg gctctcgctg agttggaatc ctttttgat ccaccggggt tcgagccccg 120  
 cttaaga 127

<210> 39  
 <211> 127  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 promoter sequence

<400> 39  
 gatctcttaa gcggggctcg aaccccggtg gatccaaaaa ggattccaac tcagcgagag 60  
 ccaccgatc aagcttcac aggtggctcc cgctgaattg gaatccagac cacggactcc 120  
 tccccgc 127

<210> 40  
 <211> 130  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 promoter sequence

<400> 40  
 ggccgcgggg aggagtccgt ggtctggatt ccaattcagc gggagccacc tgatgaagct 60  
 tgatcgggtg gctctcgctg agttggaatc ctttttgat ccaccggggt tcgagccccg 120  
 cttaagacta 130

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<210> 41

<211> 126

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
promoter sequence

<400> 41

tagtcttaag cggggctoga accccggtgg atccaaaaag gattccaact cagcgagagc 60  
caccgatca agcttcatca ggtggctccc gctgaattgg aatccagacc acggactcct 120  
ccccgc 126